

IN THE CLAIMS:

Please amend claims 1-4, 6-7, 12-16, 18, 22-24, and 26, as follows:

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1. (Amended) An electrode comprising:
- a heater arranged on a plane;
 - an upper ceramic-metal composite arranged above the heater; and
 - an lower ceramic-metal composite arranged below the heater,
- wherein the heater and the upper and lower ceramic-metal composites are cast in a base metal.
2. (Amended) An electrode comprising:
- a heater arranged on a plane; and
 - a core metal plate arranged substantially parallel to the plane and adjacent to the heater;
- wherein the heater and the core metal are cast in a base metal.
3. (Amended) The electrode according to claim 2, wherein the core metal plate comprises a plurality of base metal communication holes.
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4. (Twice Amended) The electrode according to claim 2, wherein a lower surface of the base metal is configured to adopt a shower head portion that supplies a gas.
6. (Amended) A susceptor comprising:
- a heater arranged on a plane;
 - an upper ceramic-metal composite arranged above the heater;
 - an lower ceramic-metal composite arranged below the heater; and
 - a ceramic electrostatic chuck for holding an object to be treated, the electrostatic chuck having a coefficient of linear thermal expansion substantially the same as that of the upper ceramic-metal composite,

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and being joined to an upper surface of the upper ceramic-metal composite.

7. (Amended) The susceptor according to claim 6, wherein the heater and the upper and lower ceramic-metal composites are cast in a base metal.

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12. (Amended) A plasma processing apparatus comprising:
- a processing vessel;
 - an electrode including:
 - a heater arranged on a plane;
 - an upper ceramic-metal composite arranged above the heater; and
 - an lower ceramic-metal composite arranged below the heater,
 - wherein the heater and the upper and lower ceramic-metal composites are cast in a base metal; and
 - a high frequency power source that applies a high frequency voltage to the electrode.
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13. (Amended) A plasma processing apparatus comprising:
- a processing vessel,
 - an electrode including:
 - a heater arranged on a plane; and
 - a core metal plate arranged substantially parallel to the plane and adjacent to the heater;
 - wherein the heater and the ceramic-metal composites are cast in a base metal; and

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a high frequency power source that applies a high frequency voltage to the electrode.

14. (Amended) The apparatus according to claim 13, wherein the core metal plate comprises a plurality of base metal communication holes.

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15. (Twice Amended) The plasma processing apparatus according to claim 12, wherein a lower surface of the base metal is configured to adopt a shower head portion that supplies a gas.

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16. (Amended) A plasma processing apparatus comprising:
- a processing vessel;
 - a susceptor including:
 - a heater arranged on a plane;
 - an upper ceramic-metal composite arranged above the heater;
 - an lower ceramic-metal composite arranged below the heater; and
 - a ceramic electrostatic chuck for holding an object to be treated, the electrostatic chuck having a coefficient of linear thermal expansion substantially the same as that of the upper ceramic-metal composite, and being joined to an upper surface of the upper ceramic-metal composite; and
 - a high frequency power source that applies a high frequency voltage to the susceptor.

18. (Twice Amended) The plasma processing apparatus according to claim 16, wherein the susceptor is provided with at least one heat transfer gas passage for supplying a heat transfer gas to a surface of the electrostatic chuck.

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22. (Amended) A method of making an electrode, comprising:

placing a heater and a pair of porous ceramics in a mold with a positional relationship where the pair of porous ceramics are arranged above and below the heater respectively so that the heater is positioned therebetween; and
pouring a molten base metal into the mold to cast the pair of porous ceramics and the heater in the base metal, thereby infiltrating the porous ceramic with the base metal in order to form a ceramic-metal composite.

23. (Amended) A method of making a susceptor, comprising:

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placing a heater and a pair of porous ceramics in a mold with a positional relationship where the pair of porous ceramics are arranged above the below the heater respectively so that the heater is positioned therebetween; and
pouring a molten base metal into the mold to cast the pair of porous ceramics and the heater in the base metal, thereby infiltrating the porous ceramic with the base metal in order to form a ceramic-metal composite.

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24. (Amended) The plasma processing apparatus according to claim 1, wherein a lower surface of the base metal is configured to adopt a shower head portion that supplies a gas.

26. (Amended) The electrode according to claim 13, wherein a lower surface of the base metal is configured to adopt a shower head portion that supplies a gas.

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